

Analysis Report

FCC ID: 2AANA-SEM-Z255

The Equipment Under Test (EUT) is a Micro Hi-Fi System that can accept audio sources including CD, FM Tuner, analog line-in and Bluetooth devices. The Bluetooth module in the EUT is operating in the frequency range from 2402MHz TO 2480MHz (79 channels with 1MHz channel spacing). The EUT contains USB port for 5V DC changing, The EUT is powered by 100-240VAC.

Bluetooth Module:

Antenna Type: Internal, integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 89.8dB μ V/m at 3m

Maximum allowed field strength of production tolerance: +/- 3dB

According to the KDB 447498:

For Bluetooth Module:

Based on the Maximum allowed field strength of production tolerance was 92.8dB μ V/m at 3m in frequency 2.479GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 0.572\text{mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.572mW.

The SAR Exclusion Threshold Level:

= $3.0 \cdot (\text{min. test separation distance, mm}) / \sqrt{\text{freq. in GHz}}$

= $3.0 \cdot 5 / \sqrt{2.480} \text{ mW}$

= 9.53 mW

Since the above conducted output power is well below the SAR Exclusion threshold level, so the EUT is considered to comply with SAR requirement without testing.